

What is claimed is:

1. A play enhancement system for a pneumatic projectile launcher comprising:

5 a first power source and at least a second power source for selective connection to a circuit board in a projectile hopper for the projectile launcher, wherein at least one of the first and second power sources comprises a rechargeable power source; and

10 a switching device connected to the first and second power sources, and to the circuit board for selectively connecting the first power source or second power source between a power source recharger and the circuit board.

2. The play enhancement system of claim 1, further comprising a cooling device for cooling the circuit board, the cooling device being selectively connected to the first power source or the second power source.

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3. The play enhancement system of claim 2, further comprising a temperature sensor attached to the circuit board for detecting the temperature of the circuit board and for controlling the cooling device to maintain a preselected temperature of the circuit board during play.

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4. The play enhancement system of claim 1, further comprising a third power source for selective connection in series with the first power source or the second power source.

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5. The play enhancement system of claim 4, wherein the third power source is a rechargeable power source.

6. The play enhancement system of claim 1, wherein the first power source is a rechargeable power source.

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7. The play enhancement system of claim 1, further comprising a display device for displaying an output voltage to the circuit board from the first power source or second power source.

8. The play enhancement system of claim 7, wherein the first and second power sources, display device and switching device are fixedly attached to the projectile hopper.

5 9. The play enhancement system of claim 7, wherein the first and second power sources, and switching device are electrically connected to the circuit board but are remote from the projectile hopper.

10 10. The play enhancement system of claim 1, further comprising a projectile delivery booster disposed between the projectile hopper and the projectile launcher, the projectile delivery booster comprising a housing containing a motorized projectile conveyor and a delivery tube connected between the projectile delivery booster and an entrance port on the projectile launcher.

15 11. The play enhancement system of claim 10, wherein the projectile delivery booster includes a fourth power source.

12. The play enhancement system of claim 10, wherein the projectile delivery booster is switchably connected to the first power source or the second power source.

20 13. The play enhancement system of claim 1, further comprising a voltage adjustment device for adjusting the voltage from the first and second power sources to the circuit board.

25 14. A paintball hopper comprising the play enhancement system of claim 1.

15. A pneumatic projectile launcher comprising the play enhancement system of claim 1.

30 16. A method for increasing play time and/or projectiles ejected per second comprising,

providing a play enhancement system for a pneumatic projectile launcher, the play enhancement system including a first power source and second power source for selective connection to a circuit board in a projectile hopper for the projectile launcher,

wherein at least one of the first and second power sources comprises a rechargeable power source; a recharger for recharging at least one of the first and second power sources, a display device for displaying an output voltage to the circuit board from the first power source or the second power source, and a switching device connected to the first power source, the second power source, the recharger and the circuit board for selectively connecting the first power source or second power source to the recharger and to the circuit board,

5 selecting the first power source for initial play, and

10 switching from the first power source to the second power source when the display device indicates the first power source has reached a predetermined output voltage.

17. The method of claim 16 wherein the switching device comprises a plurality of manual selection switches, and the method further comprises selecting one 15 of the selection switches to switch between the first and second power supplies when the display device signifies the predetermined output voltage.

18. The method of claim 16, wherein the play enhancement system includes a third power source for selective connection in series with the first power source or the 20 second power source, further comprising selectively connecting the third power source to the first power source or to the second power source to increase the output voltage to the circuit board.

19. The method of claim 18, wherein the play enhancement system includes a 25 voltage adjustment device for adjusting the output voltage to the circuit board, further comprising increasing or decreasing the output voltage by manipulating the voltage adjustment device.

20. In a paintball launching system containing a motorized paintball hopper 30 having an exit port, and a paintball launcher having an entry port for movement of paintballs from the hopper to the launcher, the improvement comprising:

 play enhancement means for providing power to the motorized paintball hopper, the play enhancement means including at least a first power source, at least a

second power source, wherein at least one of the first and second power sources is a rechargeable power source, and

control means connected to the first and second power sources and the motorized paintball hopper for switching between the first power source and the
5 second power source.

21. The paintball launching system of claim 20, further comprising switching means connected to the first power source, to the second power sources, and to recharger means for selectively connecting the first power source or second power
10 source to the motorized paintball hopper and to the recharger means.